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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Timm Herman

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EXAMINER

NICHOLS II, ROBERT K

ART UNIT

PAPER NUMBER

3754

MAIL DATE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/578,079	Applicant(s) HERMAN, TIMM	
	Examiner ROBERT K. NICHOLS II	Art Unit 3754	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 October 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 10-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3-6, 17-20 and 24 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 7, 8, 10, 11, 13-16 and 21-23 is/are rejected.
- 7) ☒ Claim(s) 12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

This office action is responsive to the amendment filed on 10/19/2009 . As directed by the amendment: claims 1, 3 and 7 have been amended, claim 9 has been cancelled, and new claims 22-24 have been added. Thus, claims 1-8 and 10-24 are presently pending in this application.

Claim Objections

Claim 1 is objected to because of the following informalities: Claim 1, line 3 recites "spaced face." It is suggested to amend to --a spaced face--.

Claim 1, line 5 recites "the face surface." It is suggested to amend to --a face surface--.

Claim 1, line 11 recites "the concave section." It is suggested to amend to --a concave section--.

Claim 1, line 14 recites "perimetral surfaces." It is suggested to amend to --the perimetral surface--.

Claim 1, line 17 recites "comprising forces." It is suggested to amend to --force--.

Claim 3 is objected to because of the following informalities: Claim 3, line 3 recites "spaced face." It is suggested to amend to --a spaced face--.

Claim 3, line 5 recites "the back surface." It is suggested to amend to --a back surface--.

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Claim 3, line 6 recites "the face surface." It is suggested to amend to --a face surface--.

Claim 22 is objected to because of the following informalities: Claim 22, line 9 recites " disc, a smaller." It is suggested to amend to –disc; and a smaller--.

Claim 23 is objected to because of the following informalities: Claim 23, line 1 recites " first annular taper." It is suggested to amend to –first annular tapered surface--.

Claim 24 is objected to because of the following informalities: Claim 24, line 10 recites " disc, a smaller." It is suggested to amend to –disc; and a smaller--.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

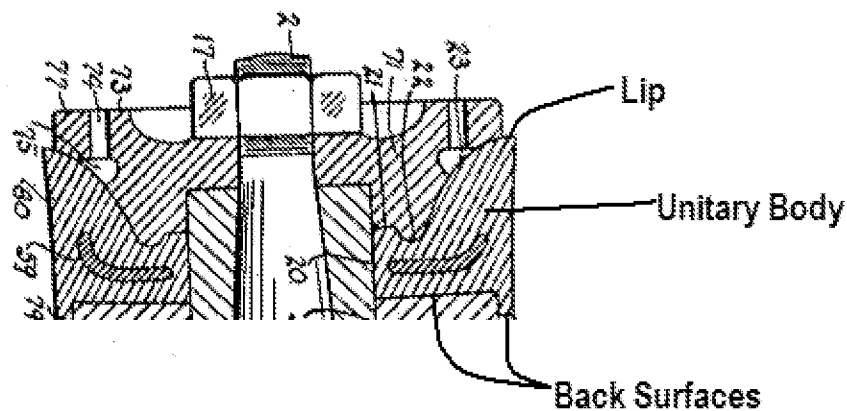
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 7, 8, 13 and 21-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Kilbele (US 1,849,096).

Regarding claims 1, 2, 7, 8 and 21, Kilbele discloses unitary body 80 of circular cross section (see portion of fig. 1) including spaced face and back surfaces (see portion of fig. 1); an axial bore extending between the surfaces for receipt of a push rod 2; the face surface including a nose section 21 surrounding the bore and an annular recess section 22 surrounding the nose section 21 (portion of fig. 1), the recess section 22 being perimetrically surrounded by a continuous lip; a perimetral surface extending

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axially from the face to the back surface (portion of fig. 1); wherein the perimetral and face surfaces together defining a perimetral lip around a concave section (see fig. 1 and page 2, lines 28-29), the lip being of tapering thickness tapering from its thickest part at a location nearest the back surface forwardly to a thin termination at a juncture of the face and perimetral surfaces (portion of fig. 1); an annular disc/camming washer (plate 71) positioned in the annular recess section 22 (fig. 1 and page 2, lines 10-17); and the disc 71 including a peripheral surface co actable with the lip to transmit force against the lip and thence against a surrounding wall of a cylinder (see fig. 1 and page 2, lines 4-17).



Portion of Figure 1

Regarding claim 13, Kilbele discloses the annular disc 71 includes an outward tapering thickness such that the disc 71 is thickest at its perimeter (see fig. 1).

Regarding claim 22, Kilbele discloses a body comprising a tapered recess 22 for receiving a camming disc 71, the tapered recess 22 being spaced axially from a face 21

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of the body and increasing in depth as the recess extends to a perimeter of the body (see fig. 1). The Examiner notes the tapered recess 22 increases in depth from a location from the face 21 extending towards the lip. (see fig. 1). Kilbele discloses first and second annular tapered surfaces located on the camming disc 71, the first annular tapered surface (lower tapered surface of disc 71) originating at a first location spaced axially from a central axis of the camming disc 71, increasing the cross-sectional thickness of the first annular tapered surface laterally as it extends to a perimeter of the camming disc 71 (see fig. 1), the second annular tapered surface (perimetral tapered surface) located about the perimeter of the camming disc 71, wherein a smaller diameter of the second annular tapered surface is in contact with the recess 22 during assembly and tapering to a relatively larger diameter extending away from the recess 22 (see fig. 1).

Regarding claim 23, Kilbele discloses the first annular taper (lower tapered surface of disc 71) includes an outwardly tapering thickness such that said camming disc 71 is thickest at its perimeter (see fig. 1).

Claims 1 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Hill (US 1,386,333).

Regarding claim 1, Hill discloses unitary body 1 of circular cross section (see fig. 1) including spaced face and back surfaces (see fig. 1); an axial bore (threaded bore) extending between the surfaces; the face surface including a nose section 3 surrounding the bore and an annular recess section 5 surrounding the nose section 3

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(fig. 1), the recess section 5 being perimetrically surrounded by a lip 4; a perimetral surface extending axially from the face to the back surface (fig. 1); wherein the perimetral and face surfaces together defining a perimetral lip around a concave section (see figs. 1 and 2), the lip 4 being of tapering thickness tapering from its thickest part at a location nearest the back surface forwardly to a thin termination at a juncture of the face and perimetral surfaces (fig. 1); an annular disc or plate 7 positioned in the annular recess section 5 (fig. 2); and the disc 7 including a peripheral surface 9 co actable with the lip 4 to transmit force against the lip 4 (see page 1, lines 55-62) and thence against a surrounding wall of a cylinder via member 6 (see fig. 1 page 1, lines 35-46).

Regarding claim 16, Hill discloses an elastic member 6 placed between the annular disc 7 and the body 1 (see fig. 2).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10, 11, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kilbele (US 1,849,096).

Regarding claims 10, 11, 14 and 15, Kilbele discloses all the elements of the claimed invention except the material of the annular disc/camming washer being polymer or metal.

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It would have been obvious to one having ordinary skill in the art at the time the invention was made to have constructed the annular disc/camming washer of polymer or metal, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hill (US 1,386,333).

Regarding claims 14 and 15, Hill discloses all the elements of the claimed invention except the material of the annular disc being polymer or metal.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have constructed the annular disc of polymer or metal, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Allowable Subject Matter

Claims 3-6, 17-20 and 24 are allowed. Claim 12 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments submitted under "Remarks" in the response filed on 10/19/2009 have been fully considered but are moot in view of the new rejections made in this action.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sowden (US 1,097,563), Flick (US 2,757,993), Wells (US 2,163,162) and Caldwell (US 2,188,106).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT K. NICHOLS II whose telephone number is (571)270-5312. The examiner can normally be reached on Mon-Friday 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on 571-272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. K. N./
Examiner, Art Unit 3754

/Kevin P. Shaver/
Supervisory Patent Examiner, Art
Unit 3754